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UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,681	12/10/2001	Yoshimichi Kudo	16869S-038800US	9306

20350 7590 01/03/2007	EXAMINER
TOWNSEND AND TOWNSEND AND CREW, LLP	PAN, JOSEPH T
TWO EMBARCADERO CENTER	

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EIGHTH FLOOR	2135	
SAN FRANCISCO, CA 94111-3834		

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/03/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

	Application No.	Applicant(s)
Office Action Summary	10/006,681	KUDO ET AL.
	Examiner	Art Unit	
	Joseph Pan	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>*13 November 2006*</u>.

2a)☐ This action is **FINAL**.　　　2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>*20-30*</u> is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>*20-30*</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>*10 December 2001*</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☒ All　b)☐ Some * c)☐ None of:

　　　1.☒ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☒ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date <u>*12/10/01*</u>.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 13, 2006 has been entered.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 20-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Traw et al. (U.S. Patent No. 6,542,610 B2), hereinafter "Traw", in view of Ikeda et al. (U.S. Patent No. 6,282,654 B1), hereinafter "Ikeda", and further in view of Itoi (U.S. Pub. No. 2001/0012440 A1).

Referring to claim 20:

      i.   Traw teaches:

          A streaming data playback apparatus comprising:

a playback circuit which reproduces streaming data from a recording medium (see figure 6; and column 3, lines 42-46; and column 6, lines 40-46 of Traw);

an interface circuit which performs a scramble process on the streaming data reproduced by the playback circuit and adds copy control information to the scrambled streaming data for transmission to destination apparatus (see figure 6, element 606 'Channel Cipher Subsystem'; column 10, lines 11-23; column 3, lines 31-32 'CGMS'; and column 5, lines 27-30 of Traw);

wherein the interface circuit exchanges key information used for the scramble process and a descramble process with a destination apparatus for the streaming data by performing an authentication process with the destination apparatus (see figure 6, element 604 'Authentication and Key Exchange Subsystem'; and column 11, lines 1-9 of Traw); and

when transmitting the streaming data, the interface circuit changes the copy control information added to the scrambled streaming data depending on a first case that the streaming data remains stored in the recording medium for playback after the streaming data transmission and a second case that the streaming data on the recording medium is to be deleted after transmission of the streaming data (see column 10, lines 11-23 of Traw).

Traw discloses the copy control information (see column 9, lines 66-67 of Traw, "Copy Control Information (such as CGMS bits)"), and changing the copy control information (see column 10, lines 11-14 of Traw, "While content is flowing across an encrypted content channel, the copy control information associated with the stream can be updated at any time via the control channel(s) between the source device and destination device(s)."). However, Traw does not elaborate on how or under what circumstances the copy control information, such as CMGS bits, is changed.

Traw does not specifically mention deleting the streaming data on the recording medium after transmission either.

ii.   Ikeda teaches an information signal recording/reproducing system, wherein Ikeda discloses the details of the copy control information CMGS [i.e., Copy

Generation Management system], particularly about using CMGS bits to control the copying of the content (see column 1, lines 40-52 of Ikeda, "For example, in the case wherein copying is free, wherein copying is allowable for the first generation, or wherein any copying is prohibited, 2-bit copy control information of "00". "10" or "11" is embedded in the information signal, respectively.").

On the other hand, Itoi teaches a data decoding recording apparatus, wherein Itoi discloses the contents are erased immediately, or whenever necessary (see page 3, paragraph [0038] of Itoi).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Ikeda into the system of Traw to use the copy control information, such as CMGS bits, to dynamically control the copying of the content: unlimited copies, one generation of copy, no more copy, etc.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Itoi into the system of Traw to delete the streaming data on the recording medium after transmission.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Ikeda into the system of Traw to use the copy control information, such as CMGS bits, to dynamically control the copying of the content: unlimited copies, one generation of copy, no more copy, etc., because CGMS is a well-known format for indicating copy protection status (see column 3, lines 31-32 of Traw).

The ordinary skilled person would have been motivated to have applied the teaching of Itoi into the system of Traw to delete the streaming data on the recording medium after transmission, because the copy control information, such as CGMS, may allow only one generation of the copy [i.e. CMGS bits is '10'].

Referring to claims 21, 30:

Traw, Ikeda, and Itoi teach the claimed subject matter: A stream data playback apparatus (see claim 20 above). Traw further discloses the copy control information (see column 3, lines 31-32; column 5, lines 27-30; and column 10, lines 11-23 of Traw).

Referring to claim 22:

Traw, Ikeda, and Itoi teach the claimed subject matter: A stream data playback apparatus (see claim 20 above). Traw further discloses transmitting a command to the destination apparatus. (see figure 1(a), 'Establish full control and content channels'; figure 3(a), element 304; and figure 6, 'Control Channel Commands' of Traw).

Referring to claim 23:

Traw, Ikeda, and Itoi teach the claimed subject matter: A stream data playback apparatus (see claim 20 above). Traw further discloses the hard disk drive (see column 1, lines 37-39 of Traw).

Referring to claim 24:

    i.   Traw teaches:

A streaming data playback apparatus comprising:

a playback circuit which reproduces streaming data from a recording medium (see figure 6; and column 3, lines 42-46; and column 6, lines 40-46 of Traw);

an interface circuit which performs a scramble process on the streaming data reproduced by the playback circuit and adds copy control information to the scrambled streaming data for transmission (see figure 6, element 606 'Channel Cipher Subsystem'; column 10, lines 11-23; column 3, lines 31-32 'CGMS'; and column 5, lines 27-30 of Traw);

wherein the interface circuit exchanges key information used for the scramble process and a descramble process with a destination apparatus of the streaming data, by performing an authentication process with the destination apparatus (see figure 6, element 604 'Authentication and Key Exchange Subsystem'; and column 11, lines 1-9 of Traw); and

during transmission of the streaming data, the interface circuit refuses to perform an authentication process with any apparatus other than the destination apparatus, and after the transmission of the streaming data, the streaming data on the recording medium is disabled from playback (see figure 6, elements 602, 604; and column 10, line 60, through column 11, line 9 of Traw).

Traw discloses the copy control information (see column 9, lines 66-67 of Traw, "Copy Control Information (such as CGMS bits)"), and changing the copy control information (see column 10, lines 11-14 of Traw, "While content is flowing across an encrypted content channel, the copy control information associated with the stream can be updated at any time via the control channel(s) between the source device and destination device(s)."). However, Traw does not elaborate on how or under what circumstances the copy control information, such as CMGS bits, is changed.

Traw does not specifically mention deleting the streaming data on the recording medium after transmission either.

ii.   Ikeda teaches an information signal recording/reproducing system, wherein Ikeda discloses the details of the copy control information CMGS [i.e., Copy Generation Management system], particularly about using CMGS bits to control the copying of the content (see column 1, lines 40-52 of Ikeda, "For example, in the case wherein copying is free, wherein copying is allowable for the first generation, or wherein any copying is prohibited, 2-bit copy control information of "00". "10" or "11" is embedded in the information signal, respectively.").

On the other hand, Itoi teaches a data decoding recording apparatus, wherein Itoi discloses the contents are erased immediately, or whenever necessary (see page 3, paragraph [0038] of Itoi).

iii.   It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Ikeda into the system of Traw to use the copy control information, such as CMGS bits, to dynamically control the copying of the content: unlimited copies, one generation of copy, no more copy, etc.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Itoi into the system of Traw to delete the streaming data on the recording medium after transmission.

iv.   The ordinary skilled person would have been motivated to have applied the teaching of Ikeda into the system of Traw to use the copy control information, such as CMGS bits, to dynamically control the copying of the content:

unlimited copies, one generation of copy, no more copy, etc., because CGMS is a well-known format for indicating copy protection status (see column 3, lines 31-32 of Traw).

The ordinary skilled person would have been motivated to have applied the teaching of Itoi into the system of Traw to delete the streaming data on the recording medium after transmission, because the copy control information, such as CGMS, may allow only one generation of the copy [i.e. CMGS bits is '10'].

Referring to claim 25:

  i. Traw teaches:

A streaming data playback apparatus comprising:

a playback circuit which reproduces streaming data from a recording medium (see figure 6; and column 3, lines 42-46; and column 6, lines 40-46 of Traw);

an interface circuit which performs a scramble process on the streaming data reproduced by the playback circuit and adds copy control information to the scrambled streaming data for transmission (see figure 6, element 606 'Channel Cipher Subsystem'; column 10, lines 11-23; column 3, lines 31-32 'CGMS'; and column 5, lines 27-30 of Traw);

wherein the interface circuit establishes a channel to a destination apparatus of the streaming data for transmission of the streaming data (see figure 2, element 210 'Establish full content channel' of Traw);

wherein the interface circuit exchanges key information used for the scramble process and a descramble process with the destination apparatus by performing an authentication process with the destination apparatus (see figure 6, element 604 'Authentication and Key Exchange Subsystem'; and column 11, lines 1-9 of Traw); and

wherein when transmitting the streaming data, the interface circuit disconnects channels other than the channel used for transmitting the streaming data to the destination apparatus (see figure 2, element 212 'Terminate content transfer on preliminary content channel' of Traw).

Traw discloses the copy control information (see column 9, lines 66-67 of Traw, "Copy Control Information (such as CGMS bits)"), and changing the copy control information (see column 10, lines 11-14 of Traw, "While content is flowing across an encrypted content channel, the copy control information associated with the stream can be updated at any time via the control channel(s) between the source device and destination device(s)."). However, Traw does not elaborate on how or under what circumstances the copy control information, such as CMGS bits, is changed.

Traw does not specifically mention deleting the streaming data on the recording medium after transmission either.

ii.   Ikeda teaches an information signal recording/reproducing system, wherein Ikeda discloses the details of the copy control information CMGS [i.e., Copy Generation Management system], particularly about using CMGS bits to control the copying of the content (see column 1, lines 40-52 of Ikeda, "For example, in the case wherein copying is free, wherein copying is allowable for the first generation, or wherein any copying is prohibited, 2-bit copy control information of "00". "10" or "11" is embedded in the information signal, respectively.").

On the other hand, Itoi teaches a data decoding recording apparatus, wherein Itoi discloses the contents are erased immediately, or whenever necessary (see page 3, paragraph [0038] of Itoi).

iii.   It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Ikeda into the system of Traw to use the copy control information, such as CMGS bits, to dynamically control the copying of the content: unlimited copies, one generation of copy, no more copy, etc.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Itoi into the system of Traw to delete the streaming data on the recording medium after transmission.

iv.   The ordinary skilled person would have been motivated to have applied the teaching of Ikeda into the system of Traw to use the copy control information, such as CMGS bits, to dynamically control the copying of the content:

unlimited copies, one generation of copy, no more copy, etc., because CGMS is a well-known format for indicating copy protection status (see column 3, lines 31-32 of Traw).

The ordinary skilled person would have been motivated to have applied the teaching of Itoi into the system of Traw to delete the streaming data on the recording medium after transmission, because the copy control information, such as CGMS, may allow only one generation of the copy [i.e. CMGS bits is '10'].

Referring to claim 26:

Traw, Ikeda, and Itoi teach the claimed subject matter: A stream data playback apparatus (see claim 25 above). Traw further discloses the interface circuit refuses to authenticate any apparatus which tries to share the key information used in the channel (see figure 6, element 604; and column 9, line 59, through column 10, line 2 of Traw).

Referring to claim 27:

      i.   Traw teaches:

A streaming data playback apparatus comprising:

a playback circuit which reproduces streaming data from a recording medium (see figure 6; and column 3, lines 42-46; and column 6, lines 40-46 of Traw);

an interface circuit which performs a scramble process on the streaming data reproduced by the playback circuit and adds copy control information to the scrambled streaming data for transmission (see figure 6, element 606 'Channel Cipher Subsystem'; column 10, lines 11-23; column 3, lines 31-32 'CGMS'; and column 5, lines 27-30 of Traw);

wherein the interface circuit establishes a first channel to a first destination apparatus of the streaming data for transmitting the streaming data, and a second channel to a second destination apparatus of the streaming data for transmitting the same streaming data (see e.g. figure 8, elements 'Content Channel A', 'Content Channel B' of Traw);

wherein the interface circuit exchanges first key information used for the scramble process and a descramble process with the first destination apparatus

by performing an authentication process with the first destination apparatus, and exchanges second key information, different from the first key information, used for the scramble process and the descramble process with the second destination apparatus by performing the authentication process with the second destination apparatus (see figure 6, element 604; and column 9, line 59, through column 10, line 2 of Traw); and

when transmitting the streaming data, the interface circuit adds to the scrambled streaming data on the first channel the copy control information indicating that the transmitted streaming data may be recorded into a recording device, and the interface circuit adds to the scrambled streaming data on the second channel the copy control information indicating that the transmitted streaming data can not be recorded by a recording device, and the streaming data on the recording medium is deleted from playback after the streaming data transmission (see column 10, lines 11-23 of Traw).

Traw discloses the copy control information (see column 9, lines 66-67 of Traw, "Copy Control Information (such as CGMS bits)"), and changing the copy control information (see column 10, lines 11-14 of Traw, "While content is flowing across an encrypted content channel, the copy control information associated with the stream can be updated at any time via the control channel(s) between the source device and destination device(s)."). However, Traw does not elaborate on how or under what circumstances the copy control information, such as CMGS bits, is changed.

Traw does not specifically mention deleting the streaming data on the recording medium after transmission either.

ii.   Ikeda teaches an information signal recording/reproducing system, wherein Ikeda discloses the details of the copy control information CMGS [i.e., Copy Generation Management system], particularly about using CMGS bits to control the copying of the content (see column 1, lines 40-52 of Ikeda, "For example, in the case wherein copying is free, wherein copying is allowable for the first generation, or wherein any copying is prohibited, 2-bit copy control information of "00". "10" or "11" is embedded in the information signal, respectively.").

On the other hand, Itoi teaches a data decoding recording apparatus, wherein Itoi discloses the contents are erased immediately, or whenever necessary (see page 3, paragraph [0038] of Itoi).

iii.   It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Ikeda into the system of Traw to use the copy control information, such as CMGS bits, to dynamically control the copying of the content: unlimited copies, one generation of copy, no more copy, etc.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Itoi into the system of Traw to delete the streaming data on the recording medium after transmission.

iv.   The ordinary skilled person would have been motivated to have applied the teaching of Ikeda into the system of Traw to use the copy control information, such as CMGS bits, to dynamically control the copying of the content: unlimited copies, one generation of copy, no more copy, etc., because CGMS is a well-known format for indicating copy protection status (see column 3, lines 31-32 of Traw).

The ordinary skilled person would have been motivated to have applied the teaching of Itoi into the system of Traw to delete the streaming data on the recording medium after transmission, because the copy control information, such as CGMS, may allow only one generation of the copy [i.e. CMGS bits is '10'].

Referring to claim 28:

Traw, Ikeda, and Itoi teach the claimed subject matter: A stream data playback apparatus (see claim 27 above). Traw further discloses the display device (see column 3, line 9 of Traw).

Referring to claim 29:

i.   Traw teaches:

A streaming data playback apparatus comprising:

a playback circuit which reproduces streaming data from a recording medium (see figure 6; and column 3, lines 42-46; and column 6, lines 40-46 of Traw);

an interface circuit which performs a scramble process on the streaming data reproduced by the playback circuit and adds copy control information to the scrambled streaming data for transmitting the scrambled streaming data and the copy control information to a recording device (see figure 6, element 606 'Channel Cipher Subsystem'; column 10, lines 11-23; column 3, lines 31-32 'CGMS'; and column 5, lines 27-30 of Traw);

wherein when transmitting the streaming data, the interface circuit changes the copy control information added to the scrambled streaming data depending on a first case that the streaming data is to remain stored on the recording medium after the streaming data transmission and a second case that the streaming data on the recording medium is to be deleted from the streaming data transmission (see column 10, lines 11-23 of Traw).

Traw further discloses the detection and the interruption of the transmission of the stream data (see column 4, lines 62-65 of Traw).

Traw discloses the copy control information (see column 9, lines 66-67 of Traw, "Copy Control Information (such as CGMS bits)"), and changing the copy control information (see column 10, lines 11-14 of Traw, "While content is flowing across an encrypted content channel, the copy control information associated with the stream can be updated at any time via the control channel(s) between the source device and destination device(s)."). However, Traw does not elaborate on how or under what circumstances the copy control information, such as CMGS bits, is changed.

Traw does not specifically mention deleting the streaming data on the recording medium after transmission either.

ii.   Ikeda teaches an information signal recording/reproducing system, wherein Ikeda discloses the details of the copy control information CMGS [i.e., Copy Generation Management system], particularly about using CMGS bits to control the copying of the content (see column 1, lines 40-52 of Ikeda, "For example, in the case wherein copying is free, wherein copying is allowable for the first generation, or wherein any copying is prohibited, 2-bit copy control information of "00". "10" or "11" is embedded in the information signal, respectively.").

On the other hand, Itoi teaches a data decoding recording apparatus, wherein Itoi discloses the contents are erased immediately, or whenever necessary (see page 3, paragraph [0038] of Itoi).

iii.   It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Ikeda into the system of Traw to use the copy control information, such as CMGS bits, to dynamically control the copying of the content: unlimited copies, one generation of copy, no more copy, etc.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Itoi into the system of Traw to delete the streaming data on the recording medium after transmission.

iv.   The ordinary skilled person would have been motivated to have applied the teaching of Ikeda into the system of Traw to use the copy control information, such as CMGS bits, to dynamically control the copying of the content: unlimited copies, one generation of copy, no more copy, etc., because CGMS is a well-known format for indicating copy protection status (see column 3, lines 31-32 of Traw).

The ordinary skilled person would have been motivated to have applied the teaching of Itoi into the system of Traw to delete the streaming data on the recording medium after transmission, because the copy control information, such as CGMS, may allow only one generation of the copy [i.e. CMGS bits is '10'].

4.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(a) Yokota et al. (U.S. Patent No.: 6,788,604 B2) disclose a recording apparatus for facilitating data erasure operations involving data recorded on a recording medium.

(b) Okuyama et al. (U.S. Patent No.: 6,256,390 B1) disclose a copy flag detecting circuit in a device detects the copy generation management information.

   (c) Tagawa et al. (U.S. Patent No.: 6,834,348 B1) disclose a data transmit/receive unit receives encrypted digital data distributed through an electronic music distribution system.

   (d) Komuro et al. (U.S. Patent No.: 6,622,249 B1) disclose a data recording apparatus.

   (e) Ogino et al. (U.S. Patent No.: 6,571,220 B1) disclose a copy generation management method.

Response to Arguments

5. Applicant's arguments, filed on October 10, 2006 , with respect to that the references do not disclose "changing the copy control information" as recited in the independent claims, have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Pan whose telephone number is 571-272-5987.

   If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached at 571-272-3859. The fax and phone numbers for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Joseph Pan

December 7, 2006

KIM VU

SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2100